We claim:

1. A compound of formula (I)

$$R^{4} = N \left[\frac{R'}{1 - 1} Z - \frac{R^{2}}{1 - 1} - N \right] - N \left[\frac{R'}{1 - 1}$$

208

Where R¹ is isoindole-1,3-dione, azido, NHR⁵ where R⁵ represents

(a) Hydrogen,

Where Q represents 'O' or 'S'

R⁶ represents

(i) Hydrogen,

Optionally substituted groups selected from,

- (ii) Alkyl,
- (iii) Cycloalkyl,
- (iv) Alkoxy,
- (v) Cycloalkoxy,
- (vi) Alkenyl,
- (vii) Alkenyloxy,
- (viii) Aryl,
- (ix) Aryloxy,
- (xii) Heteroaryl,
- (xiii) Heterocyclyl,
- (xii) Heteroaryloxy,
- (xiii) -NH-R⁷, where R⁷ represents hydrogen, optionally substituted groups selected from alkyl, cycloalkyl, hydroxyalkyl, alkoxy, cycloalkoxy, alkenyl, aryl, aralkyl, heteroaryl, heteroaralkyl,

Wherein R⁸ is optionally substituted group selected from alkyl, alkoxy, cycloalkyl, alkenyl, alkenyloxy, aryl, aryloxy, aralkyl, aralkoxy, heteroaryl, heteroaryloxy, and Q represents oxygen or sulfur;

(xiv) -N-[alkyl]2,

- (xv) -N(R^cR^d), wherein R^c and R^d together form an optionally substituted 5 or 6 member heterocycle ring containing nitrogen and optionally having one or two additional hetero atoms selected from O, S or N;
- (xvi) -SR⁸, wherein R⁸ is as defined above,
- (xv) -SO₂-alkyl;

R² and R³ at each occurrence are the same or different and are

- (ix) Hydrogen,
- (x) Halogen,
- (xi) Cyano,
- (xii) Nitro,
- (xiii) Amino

Optionally substituted groups selected from

- (xiv) Alkyl,
- (xv) Haloalkyl,
- (xvi) OR^a where R^a represents hydrogen or optionally substituted alkyl group;
- (xvii) -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

'Z' represents N, C or CH;

'....' represents a bond or nobond;

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroarylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, alkenylcarbonyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfonyl, alkylsulfonyl, alkylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl, tert-butoxycarbonyl, (BOC), heteroarylsulfonyl

R' and R" independently represent hydrogen, oxo (=O), thioxo (=S), amino, cynao, halogen, alkyl, alkoxy or haloalkyl;

Substituents on R⁴, R⁶, R⁷, R⁸, independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo (=O), thioxo (=S), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (tert-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), tert-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivates. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), thioxo (=S), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substitutents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =0, =S, cyano group, or carboxylic acid or its derivatives. their pharmaceutically acceptable salts their stereosiomers thereof, their prodrugs, their rotamers and their pharmaceutical compositions containing them.

Wherever substitutions are possible on the groups represented by R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 , they may take place 1 to 5 times, which may be same or different;

2. A compound as claimed in claim 1, wherein formula (I) as described by formula (Ia) below:

$$R^{4}-N \longrightarrow N \longrightarrow R^{2} \longrightarrow N \longrightarrow N \longrightarrow N$$

$$R^{3} \longrightarrow N \longrightarrow R^{1}$$
(Ia)

Where R¹ represents

Where Q represents 'S'

· R⁶ represents

(i) Hydrogen,

Optionally substituted groups selected from,

- (ii) Alkyl,
- (iii) Cycloalkyl,
- (iv) Alkoxy,
- (v) Cycloalkoxy,
- (vi) Alkenyl,

(vii) Alkenyloxy,

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, aminoalkyl, alkylamino, alkylaminoalklyl, acyl, haloacyl, aminocarbonyl, alkylcarbonyl, cycloalkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, aryl, aryloxy, arylcarbonyl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, heterocyclylalkylcarbonyl, tert-butoxycarbonyl (BOC), alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, heteroarylsulfonyl

Substituents on R⁴ selected from halogen, nitro, cyano, amino, hydroxy, oxo (=O), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (tert-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), tert-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives. The optional substituents on these groups are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives, phosphoric acid or its derivates;

The substitutions on the possible groups represented by R⁴, may take place 1 to 5 times, which may be same or different;

3. The compound of formula (Ia) as claimed in claim 2, where R_1 represents

S, wherein R⁶ represents alkyl or alkoxy group;

R² and R³, which may be same or different, independently represent hydrogen or halogen; R⁴ represents

R4 represents

Hydrogen, Cyanq
$$H_3C$$
 H_3C CH_3 CH_3SO_2 H_2C H_3 H_3C CH_3 H_3C CH_3 H_3C H_3 H_3C H_3 H_3C H_3 H_3C CH_3 H_3 H_3

$$H_3C$$
 H_3C
 H_3C

 The compound of formula (Ia) as claimed in claim 2, where R₁ represents

-C-R⁶
S, wherein R⁶ represents alkyl or alkoxy group;

R² and R³, which may be same or different, independently represent hydrogen or halogen; R⁴ represents

5. The compound of formula (Ia) as claimed in claim 2,

where R₁ represents

-- C-R⁶

, wherein R⁶ represents alkyl or alkoxy group;

 R^2 and R^3 , which may be same or different, independently represent hydrogen or halogen; R^4 represents cyano,

$$O_2N - O_2N -$$

6. A compound as claimed in claim 1, wherein formula (I) as described by formula (Ib) below:

$$R^{4}-N \longrightarrow R^{2} \longrightarrow N \longrightarrow N$$

$$R^{3} \longrightarrow R^{1}$$
(Ib)

Where R¹ represents

Where Q represents 'S'

R⁶ represents

(i) Hydrogen,

Optionally substituted groups selected from,

- (ii) Alkyl,
- (iii) Cycloalkyl,
- (iv) Alkoxy,
- (v) Cycloalkoxy,
- (vi) Alkenyl,
- (vii) Alkenyloxy,

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, aminoalkyl, alkylamino, alkylaminoalklyl, acyl, haloacyl, aminocarbonyl, alkylcarbonyl, cycloalkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, aryl, aryloxy, arylcarbonyl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylalkylcaarbonyl, tert-butoxycarbonyl (BOC), alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, heteroarylsulfonyl

Substituents on R⁴ selected from halogen, nitro, cyano, amino, hydroxy, oxo (=O), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl,

hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (tert-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), tert-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives. The optional substituents on these groups are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives, phosphoric acid or its derivates;

The substitutions on the possible groups represented by R⁴, may take place 1 to 5 times, which may be same or different;

which is represented by compound of formula (Ia); their pharmaceutically acceptable salts their stereosiomers thereof, pharmaceutical compositions containing them

7. The compound of formula (Ib), as defined in claim 6, where R_1 represents

R² and R³, which may be same or different, independently represent hydrogen or halogen; R⁴ represents

Hydrogen, Cyano
$$H_3C$$
, H_3C CH_3SO_2 , H_2C H_3C H_3C

$$H_3C$$
 H_3C
 H_3C

8. The compound of formula (Ib), as defined in claim 6, where R_1 represents

-C-R⁶
S, wherein R⁶ represents alkyl or alkoxy group;

R² and R³, which may be same or different, independently represent hydrogen or halogen; R⁴ represents

222

9. The compound of formula (Ib), as defined in claim 6,

R^y represents alkyl or arvi

where R_1 represents

-C-R⁶
S, wherein R⁶ represents alkyl or alkoxy group;

R² and R³, which may be same or different, independently represent hydrogen or halogen; R⁴ represents cyano,

$$O_{2}N - O_{1} - O_{2}N - O_{2}N - O_{2}N - O_{3}N - O_{2}N - O_{3}N - O_$$

10. The compound as claimed in claim 1,

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

$$H_2C = N$$
 $N = N$
 $N = N$

226

$$\begin{array}{c|c} \text{OH} & \text{O} & \\ \hline \\ \text{NO} & \text{NO} & \\ \hline \\ \text{NO} & \text{NO} & \\ \hline \\ \text{NO} & \\ \\ \text{NO$$

$$\underset{\mathsf{HO}}{ \bigcap_{\mathsf{N}}} \underset{\mathsf{N}}{ \bigcap_{\mathsf{N}}} \underset{\mathsf{N}} \underset{\mathsf{N}}{ \bigcap_{\mathsf{N}}} \underset{\mathsf{N}}{ \bigcap_{\mathsf{N}}} \underset{\mathsf{N}}{ \bigcap_{\mathsf{N}}} \underset{\mathsf{N}}{ \bigcap_{\mathsf{N}}} \underset{$$

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

$$\begin{array}{c} O \\ \\ Br \end{array} \begin{array}{c} V \\ \\ \end{array}$$

$$\begin{array}{c|c} O & & & \\ \hline O & & & \\ \hline -OH & & & \\ \end{array}$$

11. The compound as claimed in claim 1 is

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

12. The compound as claimed in claim 1 is

$$H_3C$$
 $N = N$
 $N = N$

13. The compound as claimed in claim lis

14. The compound as claimed in claim 1 is

15. A process for the preparation of compound of formula (I), which is represented by compound of formula (Ia) and (Ib) respectively

Where R¹ is isoindole-1,3-dione, azido, NHR⁵ where R⁵ represents

- (a) Hydrogen,
- (b) −C-R[€]

Where Q represents 'O' or 'S'

R⁶ represents

(i) Hydrogen,

Optionally substituted groups selected from,

- (ii) Alkyl,
- Cycloalkyl, (iii)
- (iv) Alkoxy,
- Cycloalkoxy, (v)
- (vi) Alkenyl,
- Alkenyloxy, (vii)
- (viii) Aryl,
- (ix) Aryloxy,
- (xiv) Heteroaryl,
- Heterocyclyl, (xv)
- (xii) Heteroaryloxy,
- (xiii) -NH-R⁷, where R⁷ represents hydrogen, optionally substituted groups selected from alkyl, cycloalkyl, hydroxyalkyl, alkoxy, cycloalkoxy, alkenyl, aryl, aralkyl, heteroaryl, heteroaralkyl,

- -ç-R⁸ Q ' wherein R⁸ is optionally substituted group selected from alkyl, alkoxy, cycloalkyl, alkenyl, alkenyloxy, aryl, aryloxy, aralkyl, aralkoxy, heteroaryl, heteroaryloxy, and Q represents oxygen or sulfur;
- (xiv) $-N-[alkyl]_2$,
- -N(R^cR^d), wherein R^c and R^d together form an optionally substituted 5 or 6 (xv) member heterocycle ring containing nitrogen and optionally having one or two additional hetero atoms selected from O, S or N;
- (xvi) -SR⁸, wherein R⁸ is as defined above,
- (xvii) -SO₂-alkyl;

R² and R³ at each occurrence are the same or different and are

- Hydrogen, (i)
- Halogen, (ii)
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,
- (viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;

(ix) -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

'Z' represents N, C or CH;

'.....' represents a bond or nobond;

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalklyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfonyl, arylsulfanyl, arylsulfinyl, tert-butoxycarbonyl, (BOC), heteroarylsulfonyl

R' and R' independently represent hydrogen, oxo (=O), thioxo (=S), amino, cynao, halogen, alkyl, alkoxy or haloalkyl;

Substituents on R⁴, R⁶, R⁷, R⁸, independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo (=O), thioxo (=S), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (tert-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), tert-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivates. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), thioxo (=S), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substitutents on R^2 and R^3 independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =0, =5, cyano group, or carboxylic acid or its derivatives.

their pharmaceutically acceptable salts their stereosiomers thereof, pharmaceutical compositions containing them.

Wherever substitutions are possible on the groups represented by R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸, they may take place 1 to 5 times, which may be same or different;

which comprises:

Where R^b represents R or R⁴, wherein R represents 't-butoxy carbonyl group (protecting group) and R⁴ is as defined above.

16. A pharmaceutical composition comprising (a) an antibacterially effective amount of the compound of formula (I) as claimed in claim 1 and (b) a pharmaceutically acceptable carrier, diluent, excipient or solvate.

- 17. The pharmaceutical composition of claim 16, which is a tablet, a capsule, a powder, a syrup, a solution or a suspension.
- 18. A method for inhibiting the growth of bacteria in humans and non-human mammals suffering bacterial infections, which comprises administering to a subject suffering such infection an antibacterially effective dose of the compound of claim 1.
- 19. The method according to claim 1, wherein the bacterial infection is caused by the drug susceptible or resistance bacterial pathogens.
- 20. A compound of formula (2f)

where R^b represents R or R⁴; where in R represents tert-butoxy carbonyl (BOC)

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalklyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkyl, heteroaralkyl, heterocyclylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfonyl, alkylsulfonyl, alkylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfonyl

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,
- (viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;
- (ix) -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl,

WO 2005/082892 252 PCT/IB2005/000343

carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

R' and R" independently represent hydrogen, oxo (=O), thioxo (=S), amino, cynao, halogen, alkyl, alkoxy or haloalkyl;

Substituents on R⁴ independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo (=O), thioxo (=S), =N-CN, =N-ORx, where Rx represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylaminoalkyl, aminocarbonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (tert-butyl-dimethyltert-butoxycarbonyl (TBDMSO), (BOC), silanyloxy)-acetyl chloride hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivates. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), thioxo (=S), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substitutents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =O, =S, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R^2 , R^3 and R^4 , they may take place 1 to 5 times, which may be same or different.

21. A compound of formula (2k)

$$RN = \begin{bmatrix} R' & R^2 \\ -| & -| \\ R'' & R^3 \end{bmatrix} - NH_2$$

$$(2k)$$

where R represents tert-butoxy carbonyl (BOC)

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,

(viii) ORa where Ra represents hydrogen or optionally substituted alkyl group;

(ix) -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

253

R' and R" independently represent hydrogen, oxo (=O), thioxo (=S), amino, cynao, halogen, alkyl, alkoxy or haloalkyl;

Substitutents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =0, =S, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R² and R³ they may take place 1 to 5 times, which may be same or different.

22. A compound of formula (21)

where R represents tert-butoxy carbonyl (BOC)

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,
- (viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;
- -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

R' and R" independently represent hydrogen, oxo (=0), thioxo (=S), amino, cynao, halogen, alkyl, alkoxy or haloalkyl;

Substitutents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =O, =S, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R² and R³ they may take place 1 to 5 times, which may be same or different.

- 23. The compound of claim 1, which is $(1-\{4-\{4-\{2(S),3-D\}\}\}-1)+\{1,2,3\}\}$ triazol-4-ylmethyl)-thiocarbamic acid Omethyl ester or a salt there of
- 24. The compound of claim 1, (1-{3,5-Difluoro-4-[4-(2(R),3(S),4-trihydroxy-butyryl) -piperazin-1-yl]-phenyl}-1H [1,2,3]triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of
- 25. The compound of claim 1, which is $(1-\{4-[1-(2,3-Dihydroxy-propionyl)-1,2,3,6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl\}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of$
- 26. The compound of claim 1, which is {1-[4-(4-Aminooxalyl-piperazin-1-yl)-3,4-difluoro-phenyl]-1*H*-[1,2,3]triazol-ylmethyl}-thiocarbamic acid *O*-methyl ester or a salt there of
- 27. The compound of claim 1, which is $(1-\{4-\{4-\{2(R),3-\text{Dihydroxy-propionyl}\}\}-1H-\{1,2,3\}\})$ triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of
- 28. The compound of claim 1, which is (1-{3,5-Difluoro-4-[4-(3-hydroxymethyl-propionyl)-piperazin-1-yl]-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid Omethyl ester or a salt there of
- 29. The compound of claim 1, which is (1-{4-[1-(2(S), 3-Dihydroxy-propionyl)-1, 2,
- 3, 6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl}-1H-[1,2,3] triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of
- 30. The compound of claim 1, which is (1-{4-[1-(2(R), 3-Dihydroxy-propionyl)-1, 2,
- 3, 6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl}-1H-[1, 2, 3] triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of
- 31. The compound of claim 1, which is (1-{4-[4-(3(S),4-Dihydroxy-butyryl)-piperazin-1-yl]-3,5-difluoro-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid Omethyl ester or a salt there of
- 32. The compound of claim 1, which is (1-{3,5-Difluoro-4-[1-(3-hydroxy-2-hydroxymethyl-propionyl)-1,2,3,6-tetrahydro-pyridin-4-yl]-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid O-methyl ester or a salt there of